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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,021	12/11/2003	Kun-Tzu Lin	TSM03-0406	7493
43859	7590	08/16/2005	EXAMINER	
SLATER & MATSIL, L.L.P. 17950 PRESTON ROAD, SUITE 1000 DALLAS, TX 75252			LOPEZ, FRANK D	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/733,021

Applicant(s)

LIN ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on June 15, 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14,15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 is/are allowed.
- 6) ☒ Claim(s) 1,3-6,12 and 14 is/are rejected.
- 7) ☒ Claim(s) 7-11 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

Applicant's arguments filed June 15, 2005, have been fully considered but they are not deemed to be persuasive.

Applicant appears to only argue the 102 rejections. The teaching of Baughman is to form identical damping structure on opposite sides of the piston. This is applicable to Steinkamp et al to make identical damping structures on opposite sides of the piston.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

Claims 1, 3-6, 12 and 14 are rejected under 35 U.S.C. § 103 as being unpatentable over Steinkamp et al in view of Baughman. Steinkamp et al discloses a linear fluid motor comprising a piston (65) movable in a stationary cylinder (60), between end positions, by selectively introducing or evacuating via first (62) or second (64) ports, through a wall of the cylinder, to or from first and second variable volumes, respectively, on first and second sides, respectively, of the piston; wherein seals (67, 73) define a first fixed volume chamber (74), movable with the piston, between the piston and the wall of the cylinder and connected to the first variable volume by a first restrictive orifice (75); wherein the first port and first orifice are so related that, when the piston is only at or less than a selected distance from the first end, the fluid enters or leaves the first variable volume by the first orifice; but does not disclose that the seals define a second fixed volume chamber, movable with the piston, between the piston and the wall of the cylinder and connected to the second variable volume by a second restrictive orifice; wherein the second port and second orifice are so related that, when the piston is at or less than a selected distance from the second end, the fluid enters or leaves the second variable volume by the second orifice.

Baughman teaches, for a linear fluid motor comprising a piston (20) movable in a stationary cylinder (12), between end positions, by selectively introducing or evacuating via first (24) or second ports, through a wall of the cylinder, to or from first and second variable volumes, respectively, on first and second sides, respectively, of the piston; wherein seals (40, 30) define a first volume chamber (46), movable with the piston, between the piston and the wall of the cylinder and connected to the first variable volume by a first restrictive orifice (48); wherein the first port and first orifice are so related that, when the piston is only at or less than a selected distance from the first end, the fluid enters or leaves the first variable volume by the first orifice; that the seals (52, 30) define a second volume chamber (58), identical to the first chamber, for the purpose of cushioning the piston when it approaches either end of the cylinder.

Since Steinkamp et al and Baughman are both from the same field of endeavor, the teaching disclosed by Baughman would have been recognized in the pertinent art of Steinkamp et al. It would have been obvious at the time the invention was made to one having ordinary skill in the art to make the seals of Steinkamp et al define a second identical volume chamber, such that it is a fixed volume chamber, movable with the piston, between the piston and the wall of the cylinder and connected to the second variable volume by a second restrictive orifice; wherein the second port and second orifice are so related that, when the piston is at or less than a selected distance from the second end, the fluid enters or leaves the second variable volume by the second orifice, as taught by Baughman, for the purpose of cushioning the piston when it approaches either end of the cylinder.

### ***Conclusion***

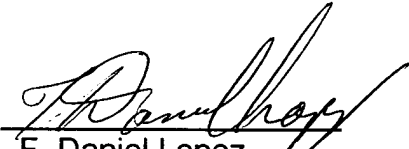
Claims 17-20 are allowable.

Claims 7-11 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read "F. Daniel Lopez", is written over a horizontal line.

F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
August 12, 2005